

REMARKS

The Examiner is thanked for the courtesy of the interview granted applicants' attorney on August 4, 2004. In response to the discussions at the interview and the comments attached to the Advisory Action that was mailed on July 19, 2004, the present application has been carefully reviewed and amended as suggested by the Examiner.

In particular, in accordance with the last paragraph at the end of page 2 of the Advisory Action, each of the independent claims in the present application has been amended to clarify the nature of the dividing plate such that the dividing plate is made of a plurality of laminated plates and that the plates are connected together so as to separate the radicals generated in a plasma discharge space from the precursor gas while the precursor gas is in the internal spaces.

As discussed at the interview, one of the objects of the present invention is to ensure that the radicals passing through the divided plate from the plasma discharge space into the film deposition process space do not react with the precursor gas in the internal spaces. This point has been clarified by the foregoing amendments.

Applicants refer to the arguments set forth in the response filed on June 29, 2004, and will summarize only certain points of these arguments. The Examiner is invited to carefully review the response submitted on June 29, 2004 and to effectively incorporate the arguments made therein into this response.

In summary, applicants again submit that the ion extracting or directing mechanism 52 of *Ashtiani* is not a dividing plate in that it does not function to divide or separate any

reagents or gases, and, in particular does not operate so as to separate the radicals generated in the plasma discharging space from the precursor gas while the precursor gas is in the internal spaces.

With regard to the combination of *Ashtiani* and *Umotoy*, applicants again submit that there is no teaching or suggestion in the art to make the combination proposed by the Examiner. Specifically, *Ashtiani* does not indicate that there is any problem with commingling of the process gases and reactant gases prior to reaching the processing region 14. And, neither of the cited references sets forth any credible reason why one of ordinary skill in the art would have been motivated to take the shower head of *Umotoy* and deploy it in the apparatus disclosed by *Ashtiani*.

Furthermore, the teachings of *Ashtiani* and *Umotoy* appear to be inconsistent. Specifically, *Ashtiani* appears to be doing as much as possible to encourage the acceleration of the ions from the source region 12 to the processing region 14. It is likely that the shower head assembly of *Umotoy* would be inconsistent with the intended goal of *Ashtiani* of propelling ions toward the substrate 20 from the source region 12.

Accordingly, applicants submit that the combination of *Umotoy* and *Ashtiani* is improper and does not teach or suggest the claimed invention.

In response to a request from the Examiner during the interview, a Request for Approval of Drawing Corrections is filed concurrently herewith, wherein Figures 1(a) and 1(b) are labeled as conventional technology. As explained in the response filed on February 6, 2003, Figures 1(a) and 1(b) do not represent prior art against the present invention.


Also at the interview, the Examiner inquired as to the meaning of "radical." In the present application, the term "radical" means an electrically neutral, but active species.

Accordingly, in view of the foregoing amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections from the present application. In the event that there are any questions concerning this response, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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